

CLAIMS

We claim:

1. An optoelectronic module comprising:

electronic circuitry;

an optical sub-assembly coupled to said electronic circuitry; and

a housing enclosing said electronic circuitry and said optical sub-assembly, said housing comprising first and second mating parts, at least one of said first and second parts comprising a latch and the other of said first and second parts comprising a shoulder positioned to engage said latch when said first and second parts are mated to form said housing and hold said first and second parts together.

2. The optoelectronic module of claim 1 wherein said latch and said shoulder can be disengaged from each other after said first and second parts of said housing are mated.

3. The optoelectronic module of claim 1 wherein said latch comprises a resilient bar having first and second ends, said bar cantilevered from said one part of said housing at said first end and comprising a dog at said second end adapted to engage said shoulder on said other part of said housing.

4. The optoelectronic module of claim 2 wherein said latch and said shoulder comprise a plurality of mating latches and shoulders, said mating latches and shoulders comprising a first subset for which said latch is on said first part and said mating shoulder is on said second part and a second subset for which said latch is on said second part and said mating shoulder is on said first part.

5. The optoelectronic module of claim 2 wherein said latch is accessible from external of said module so that it can be biased out of engagement with said shoulder without damaging said module.

6. The optoelectronic module of claim 3 wherein said housing comprises an outer surface and said second end of said latch is adjacent said outer surface of said housing when assembled and can be biased out of engagement with said mating shoulder manually.

7. The optoelectronic module of claim 1 wherein said housing further comprises slots through which fluid may enter and exit said module.

8. The optoelectronic module of claim 1 further comprising:  
electrical connectors protruding from said module for electrically coupling said electronic circuitry to external circuitry.

9. The optoelectronic module of claim 8 wherein said electronic circuitry comprises a printed circuit board and said electrical connectors comprise pins extending from said printed circuit board.

10. The optoelectronic module of claim 8 further comprising a connector  
5 adapted to mate with an optical plug of an optical fiber.

11. The optoelectronic module of claim 10 wherein said connector is integral with said housing.

12. The optoelectronic module of claim 1 wherein said electronic circuitry comprises a printed circuit board and said optical sub-assembly is coupled to said  
10 printed circuit board by flex circuit.

13. The optoelectronic module of claim 12 wherein said flex allows said optical subassembly to move relative to said printed circuit board.

14. The optoelectronic module of claim 8 further comprising:  
15 a conductive gasket circumscribing said connector.

15. The optoelectronic module of claim 14 wherein said gasket comprises a shell circumscribing said connector and a plurality of fingers extending radially from said shell.

5 16. The optoelectronic module of claim 15 wherein said fingers are adapted to contact a faceplate when said module is mounted in a chassis with said connector protruding through said faceplate for providing electromagnetic interference shielding.

17. The optoelectronic module of claim 1 wherein said electronic circuitry comprises a printed circuit board, said module further comprising:

10 a conductive shield sized, shaped, and positioned within said housing to cover said electronic circuitry on said printed circuit board.

18. The optoelectronic module of claim 17 wherein said shield comprises two shields.

19. The optoelectronic module of claim 8 further comprising mounting pins protruding from said housing for mounting said module to external circuitry.